REMARKS

Claims 1-29, 33-35, 38-41, 44-47, 50-53 are pending in the application.

Claims 1-29, 33-35, 38-41, 44-47, 50-53 stand rejected.

Claims 1-6, 8-25, 50, and 53 have been amended.

Rejection of Claims under 35 U.S.C. §101

Claims 1-5 and 26-29 stand rejected in the Final Office Action under 35 U.S.C. § 101 as being directed to non-statutory subject matter. While not conceding that Claims 1-5 and 26-29 as previously drafted were directed to non-statutory subject matter, but instead to present the claims in condition for allowance, Applicants have chosen to amend the claims as suggested by the Examiner in the Final Office Action. Therefore, Claim 1 has been amended to include a limitation that the claimed method is performed by a processor configured to perform said method.

In light of the above amendment, Applicants respectfully submit that Claims 1-5 and 26-29 are directed toward statutory subject matter and are therefore allowable, and Applicants respectfully request Examiner's reconsideration of the present rejection.

Rejection of Claims under 35 U.S.C. §102

Claims 1-29, 33-35, 38-41, 44-47, 50-53 stand rejected under 35 U.S.C. §102(b) as being anticipated by Pasi et al., "Calculating Attribute Values Using Inheritance Structure in Fuzzy Object-Oriented Data Models" (Pasi). Applicants respectfully traverse this rejection.

The Office Action relies on Pasi in rejecting each of the listed claims. While not conceding that Pasi is prior art, but instead to present the claims in condition for allowance, Applicants have chosen to overcome the Examiner's rejection by amendments that more clearly distinguish the claims over Pasi. Applicants' amendments are made without prejudice to Applicants' right to establish, for example in a continuing application, that Pasi is not prior to an invention now or hereafter claimed.

Independent Claims 1, 6, 11, 16 and 21: Applicants respectfully submit that Pasi does not disclose each limitation of Independent Claims 1, 6, 11, 16 and 21, as amended, and therefore Pasi cannot anticipate those claims or any claims that depend therefrom. In the below discussion, Applicants further respond to the positions expressed in the Office Action.

Claims 1, 6, 11, 16 and 21 have each been amended to include a limitation corresponding to:

> associating each object with a class within the class hierarchy such that each attribute describing the object has a non-null value, wherein said each attribute is a member of the set of attributes assigned to the class.

See, e.g., Claim 1. Applicants respectfully submit that Pasi provides no disclosure of such an association of objects with classes such that the association results in each attribute describing the object having a non-null value.

The claimed invention prevents an object from being associated with null attributes (e.g., resulting from a child class having attributes that are unnecessary or undesirable in describing an object). As described in the specification, this results in an advantage of less memory space being consumed by objects in a child class.

Pasi does not recognize the problem solved by the present invention. As disclosed, Pasi does not perform an association of objects with classes such that each attribute

describing the object has a non-null value. Instead, Pasi discloses placing objects in classes without regard to whether attributes have null values. Then, if attributes have a null value or an imprecise value, Pasi discloses generating non-null or more precise values using fuzzy-set based inheritance relationships to fill those null values.

> [A] method to compute default values for unknown objects' attributes is proposed, based both on the association of typical values with the attributes in the intensional definition of a class and on the application of a prioritized aggregation operator to combine typical values appearing in an inheritance structure."

See, e.g., Pasi, p. 556. (Abstract)

> This method makes it possible to address two distinct cases of incompleteness of the value of an objects' attribute.
>
> (1) The value of the object's attribute is unknown. In this case, the proposed method allows one to computer a default value for it.
>
> (2) The value of an objects' attribute is imprecisely known and it is specified by means of a possibility distribution. In this case, the typical value stored at the class level can be used to refine the knowledge about the imperfect attribute value.

Pasi, p. 557 (Column 1). Applicants respectfully submit that such calculation of default or refined values for attributes that would otherwise be null does not provide disclosure of the above-quoted amended claim limitation. Further, Applicants submit that Pasi teaches away from the claimed invention by allowing inheritance of null values but then filling them (Pasi) versus preventing inheritance of a null attribute value by selecting appropriate classes (the present invention).

Claims 1-6, 11, 16 and 21 include additional amendments designed to provide consistency with the above-quoted amended claim limitation, but which Applicants respectfully submit do not otherwise narrow the scope of the claims. For at least the above reasons, Applicants respectfully submit that Claims 1, 6, 11, 16 and 21, as amended, and all
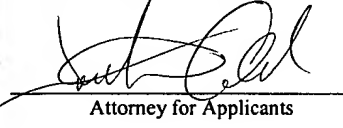
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remaining claims dependent therefrom (Claims 2-5, 7-10, 12-15, 17-20, 22-29, 33-35, 38-41, 44-47, and 50-53) are in condition for allowance and request Examiner's reconsideration of the rejection and indication of same.
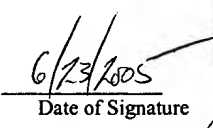
Dependent Claims: The dependent claims that have been indicated as amended have been amended to provide consistency with the amended independent claims from which they depend, where necessary, and to correct certain clerical errors with regard to spelling and the like. Applicants respectfully submit for the reasons described above with regard to the independent claims, that these claims are in condition for allowance and respectfully request Examiner's reconsideration of the rejection and indication of same.
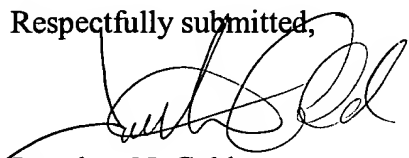
CONCLUSION

The application is believed to be in condition for allowance, and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is invited to telephone the undersigned.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on June 23, 2005.

_____   6/23/2005
Attorney for Applicants   Date of Signature

Respectfully submitted,

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